

What is claimed is:

- 1 1. A method of improving traffic management in a computing network, comprising steps of:
 - 2 detecting a changed environmental condition;
 - 3 generating a notification of the detected condition;
 - 4 analyzing the generated notification by consulting one or more criteria; and
 - 5 determining, based on the analysis, whether a currently-executing application should
 - 6 modify its behavior.

2 2. The method according to Claim 1, further comprising the step of modifying, by the currently-executing application, its behavior.

1 3. The method according to Claim 2, wherein the modification comprises reducing a size of one or more data objects generated by the currently-executing application.

1 4. The method according to Claim 2, wherein the modification comprises reducing data retrieval by the currently-executing application.

1 5. The method according to Claim 2, wherein the modification comprises dropping one or
2 more connections with the currently-executing application.

1 6. The method according to Claim 2, wherein the modification comprises increasing a size of
2 one or more data objects generated by the currently-executing application.

1 7. The method according to Claim 2, wherein the modification comprises increasing data
2 retrieval by the currently-executing application.

1 8. The method according to Claim 2, wherein the modification comprises changing thread
2 assignments of the currently-executing application.

1 9. The method according to Claim 2, wherein the modification comprises changing the
2 currently-executing application's use of one or more other applications.

1 10. The method according to Claim 1, wherein the changed environmental condition pertains
2 to system-related conditions.

1 11. The method according to Claim 1, wherein the changed environmental condition pertains
2 to network-related conditions.

1 12. The method according to Claim 1, wherein the changed environmental condition pertains
2 to client-related conditions in one or more clients of the currently-executing application.

1 13. The method according to Claim 1, wherein the changed environmental condition occurred
2 internally to a system in which the currently-executing application is executing.

- 1 14. The method according to Claim 13, wherein the generated notification pertains to a
2 condition of a local network protocol stack.
- 1 15. The method according to Claim 13, wherein the generated notification pertains to a
2 condition of the system in which the currently-executing application is executing.
- 1 16. The method according to Claim 13, wherein the analyzing step is performed by a policy
2 manager component of the system in which the currently-executing application is executing.
- 1 17. The method according to Claim 1, wherein the changed environmental condition occurred
2 externally to a system in which the currently-executing application is executing.
- 1 18. The method according to Claim 17, wherein the generated notification pertains to a
2 condition of a client of the currently-executing application.
- 1 19. The method according to Claim 17, wherein the generated notification pertains to a
2 condition of a remote network platform.
- 1 20. The method according to Claim 17, wherein the generated notification pertains to a
2 condition of a remote server with which the currently-executing application is communicating.
- 1 21. The method according to Claim 20, wherein the modification comprises making

2 adjustments pertaining to the remote server.

1 22. A method of dynamically modifying behavior of an executing application in response to
2 changing environmental conditions, comprising steps of:

3 exchanging information among multiple components of a network as to each component's
4 support for environmental awareness;

5 detecting, by a selected one of the components, an environmental change;

6 determining, responsive to the detecting, those other ones of the components which
7 indicated an interest in the detected environmental change during the exchanging step;

8 notifying those other ones of the detected environmental change; and

9 dynamically modifying behavior of an application currently executing at one or more of
10 the notified components, in order to account for the detected environmental change.

11 23. A system for improving traffic management in a computing network, comprising:

12 means for detecting a changed environmental condition;

13 means for generating a notification of the detected condition;

14 means for analyzing the generated notification by consulting one or more criteria;

15 means for determining, based on the analysis, whether a currently-executing application
16 should modify its behavior; and

17 modifying, by the currently-executing application, its behavior.

18 24. A computer program product for dynamically modifying behavior of an executing

2 application in response to changing environmental conditions, the computer program product
3 embodied on one or more computer-readable media and comprising:

4 computer-readable program code means for exchanging information among multiple
5 components of a network as to each component's support for environmental awareness;
6 computer-readable program code means for detecting, by a selected one of the
7 components, an environmental change;
8 computer-readable program code means for determining, responsive to operation of the
9 computer-readable program code means for detecting, those other ones of the components which
10 indicated an interest in the detected environmental change during operation of the computer-
11 readable program code means for exchanging;
12 computer-readable program code means for notifying those other ones of the detected
13 environmental change; and
14 computer-readable program code means for dynamically modifying behavior of an
15 application currently executing at one or more of the notified components, in order to account for
16 the detected environmental change.